

Claims

[c1] 1. A lock for overlapping parallel sliding members, comprising:
a hinge member having two leaves;
the two leaves including a fixed leaf permanently secured to one of
overlapping sliding members, and a pivotal leaf pivotally moveable between
locked and unlocked positions, to permit sliding of said overlapping
members in the unlocked position, and, when turned an about 90 degree
angle to the locked position, to abut the face of one of said overlapping
members to prevent displacement there between; and
a resistance mechanism for lightly-resisting pivoting of said pivotal leaf
against displacement or rotation in the locked position, said resistance
mechanism being indestructible in normal operation without pre-
manipulation of any portion of the lock prior to pivoting movement.

[c2] 2. The device of claim 1, wherein the resistance mechanism is two-state,
providing for lightly-resisting pivoting of said pivotal leaf against
displacement or rotation in both the locked and unlocked positions.

[c3] 3. The device of claim 1, wherein said resistance mechanism comprises a
cam on one of said leaves having at least one flattened lobe, the at least one
flattened lobe corresponding to the locked position, and a displaceable
follower on the other leaf engaged with the cam for providing light
resistance to pivoting relative movement of the leaves when said follower is
engaged with said flattened lobe.

[c4] 4. The device of claim 3, wherein the follower has a planar surface engaged
with the cam, the planar surface being engageable with the at least one
flattened lobe of cam when the pivotal leaf is in the locked position.

[c5] 5. The device of claim 2, wherein said resistance mechanism comprises a
cam on one of said leaves having at least two flattened lobes, at least one
flattened lobe corresponding to the locked position and at least one other
flattened lobe corresponding to the unlocked position, and a displaceable
follower on the other leaf engaged with the cam for providing light

resistance to pivoting relative movement of the leaves when said follower is engaged with either one of said flattened lobes.

- [c6] 6. The device of claim 3, wherein the cam is located on the fixed leaf and the follower is located on the pivotal leaf.
- [c7] 7. The device of claim 5, wherein the cam is located on the fixed leaf and the follower is located on the pivotal leaf.
- [c8] 8. The device of claim 3, wherein the follower is formed of a deformable material, and the follower is dimensioned to permit increased elastic deformation thereof by the cam during pivoting relative movement of the leaves.
- [c9] 9. The device of claim 8 with the follower being non-deformed when the pivotal leaf is in the locked position.
- [c10] 10. The device of claim 5, wherein the follower is formed of a deformable material, and the follower is dimensioned to permit increased elastic deformation thereof by the cam during pivoting relative movement of the leaves.
- [c11] 11. The device of claim 10 with the follower being non-deformed when the pivotal leaf is in the locked and unlocked position.
- [c12] 12. The device of claim 3 with the cam and follower being centrally located in abutting inner longitudinal edges of the leaves.
- [c13] 13. The device of claim 5 with the cam and follower being centrally located in abutting inner longitudinal edges of the leaves.
- [c14] 14. The device of claim 12 with the follower extending from a raised central portion of the pivotal leaf.
- [c15] 15. The device of claim 13 with the follower extending from a raised central portion of the pivotal leaf.

[c16] 16. The device of claim 3 with the pivotal leaf having an outer longitudinal edge sloped outwardly away from a hinge axis of the leaves and a surface of the sliding member adjacent to pivotal leaf when the pivotal leaf is in the unlocked position.

[c17] 17. The device of claim 5 with the pivotal leaf having an outer longitudinal edge sloped outwardly away from a hinge axis of the leaves and a surface of the sliding member adjacent to pivotal leaf when the pivotal leaf is in the unlocked position.

[c18] 18. A lock for overlapping parallel sliding members, comprising:
a hinge member having two leaves;
the two leaves including a fixed leaf permanently secured to one of overlapping sliding members, and a pivotal leaf pivotally moveable between locked and unlocked positions, to permit sliding of said overlapping members in the unlocked position, and, when turned an about 90 degree angle to the locked position, to abut the face of one of said overlapping members to prevent displacement there between;
a resistance mechanism for lightly-resisting pivoting of said pivotal leaf against displacement or rotation in the locked position, said resistance mechanism being indestructible in normal operation without pre-manipulation of any portion of the lock prior to pivoting movement;
wherein said resistance mechanism comprises a cam on one of said leaves having at least one flattened lobe, the at least one flattened lobe corresponding to the locked position, and a displaceable follower on the other leaf engaged with the cam for providing light resistance to pivoting relative movement of the leaves when said follower is engaged with said flattened lobe;
wherein the follower has a planar surface engaged with the cam, the planar surface being engageable with the at least one flattened lobe of cam when the pivotal leaf is in the locked position;
wherein the cam is located on the fixed leaf and the follower is located on the pivotal leaf;

wherein the follower is formed of a deformable material, and the follower is dimensioned to permit increased elastic deformation thereof by the cam during pivoting relative movement of the leaves;

with the follower being non-deformed when the pivotal leaf is in the locked position;

with the cam and follower being centrally located in abutting inner longitudinal edges of the leaves;

with the follower extending from a raised central portion of the pivotal leaf; and

with the pivotal leaf having an outer longitudinal edge sloped outwardly away from a hinge axis of the leaves and a surface of the sliding member adjacent to pivotal leaf when the pivotal leaf is in the unlocked position.

[c19]

19. A lock for overlapping parallel sliding members, comprising:
a hinge member having two leaves;
the two leaves including a fixed leaf permanently secured to one of
overlapping sliding members, and a pivotal leaf pivotally moveable between
locked and unlocked positions, to permit sliding of said overlapping
members in the unlocked position, and, when turned an about 90 degree
angle to the locked position, to abut the face of one of said overlapping
members to prevent displacement there between;
a resistance mechanism for lightly-resisting pivoting of said pivotal leaf
against displacement or rotation in the locked position, said resistance
mechanism being indestructible in normal operation without pre-
manipulation of any portion of the lock prior to pivoting movement,
wherein the resistance mechanism is two-state, providing for lightly-
resisting pivoting of said pivotal leaf against displacement or rotation in both
the locked and unlocked positions;
wherein said resistance mechanism comprises a cam on one of said leaves
having at least two flattened lobes, at least one flattened lobe corresponding
to the locked position and at least one other flattened lobe corresponding to
the unlocked position, and a displaceable follower on the other leaf engaged

with the cam for providing light resistance to pivoting relative movement of the leaves when said follower is engaged with either one of said flattened lobes;

wherein the cam is located on the fixed leaf and the follower is located on the pivotal leaf;

wherein the follower is formed of a deformable material, and the follower is dimensioned to permit increased elastic deformation thereof by the cam during pivoting relative movement of the leaves;

with the follower being non-deformed when the pivotal leaf is in the locked and unlocked position;

with the follower extending from a raised central portion of the pivotal leaf; and

with the pivotal leaf having an outer longitudinal edge sloped outwardly away from a hinge axis of the leaves and a surface of the sliding member adjacent to pivotal leaf when the pivotal leaf is in the unlocked position.